Clinical Rotator

Catalog No. 14-251-200

The FISHER Clinical Rotator provides the proper oscillation amplitude throughout the full range of operational speeds specified in APHA, Kline, Mazzini, VDRL and other micro-flocculation tests described in U.S. Public Health Service Publication No. 411, Manual of Serologic Tests for Syphilis. Speed can be varied from 60 to 210 oscillations per minute, a range that exceeds current requirements and allows margin for new or revised flocculation and antibody tests with conjugated proteins. Once selected, speed is accurately maintained by a solid-state controller regardless of variations in load or line voltage.

Basically, the Clinical Rotator consists of a base cabinet that houses the motor, controller, and operating selectors and supports the oscillating top plate. Rubber suction feet attached to the cabinet base prevent "walking" when unit is in operation.

The large, removable molded-rubber slide platform, measuring 13x13 inches, holds up to twenty-four 3x2 slides and features a rough surface and high ridge border to hold slides in place. If desired, it can be lifted from the rotating top plate and used as a tray to transport slides between processing stations.

Unpacking

The Clinical Rotator is shipped in a single carton. After unpacking, check each item against the packing list below. If any item is missing, notify your Fisher branch or representative regarding the shortage. Refer to both the name and the number of the item in question.

***NOTE:** If shipping damage is observed, keep the entire shipment intact - retaining the carton and all packing material - and file claim with the final carrier. Usually the firm will send an investigator to ascertain liability.*

Qty.	Item	Part Number
1	Clinical Rotator	11405
1	Slide Platform	14-251-205
1	Warranty Card	01001
1	Instructions	14577

Controls & Indicators

Before operating the Clinical Rotator, become familiar with the function and operation of the front panel controls as described below:

TIME selector: A switch and mechanically-operated timer that contains a 0 to 25 minute scale (divided into 30 second intervals) for timing oscillation periods. The selector also incorporates an OFF position for starting and stopping the unit.

HOLD switch: An ON/OFF toggle switch that overrides the TIME selector when placed in the HOLD position, allowing rotator to operate continuously. CAUTION: The TIME selector should be set to OFF when the HOLD switch is employed.

SPEED selector: A continuously variable potentiometer that is factory-calibrated to control operational speeds between 60 and 210 oscillations per minute. Scale is divided into 10 oscillations per minute increments.

BUZZER: Sounds upon completion of the preset oscillation period.

Operation

To operate the Clinical Rotator, perform the following:

1. Set TIME selector to OFF position and HOLD switch to OFF (down) position.
2. Check data plate on rear of unit, then insert line cord plug into suitable electrical outlet.
3. Set SPEED selector to 210.
4. Set TIME selector to 15 minutes and allow time period to expire.
   ***NOTE:** This step permits components to "warm-up" so that stable oscillation speeds can be obtained.*
5. After warm-up time expires, arrange slides on platform, and place platform on oscillating top plate.
6. Set SPEED selector to desired oscillations/minute.

   ***NOTE:** The Clinical Rotator is factory calibrated so that all settings closely approximate actual speed. For critical applications, the SPEED selector should be set and/or checked using a mechanical counter and stopwatch (see CALIBRATION).*
7. For continuous operation, set HOLD switch to HOLD (up) position. For timed operation, set HOLD switch to OFF (down) position and turn TIME selector clockwise to desired setting.
   ***NOTE:** If selecting five minutes or less, turn selector pointer past 5 then back to desired time interval. If changing a setting, turn pointer to OFF then to desired position.*
8. Repeat steps 5 through 7 for remaining slides.

Calibration

The Clinical Rotator is factory-calibrated and should require no further adjustments under normal circumstances. However, if the motor or control circuit component is replaced, the unit must be checked and calibrated as follows:

***NOTE:** It is strongly recommended that calibration be performed by a qualified service technician. Failure to use proper techniques may result in shock hazard and damage to unit.*

1. Set HOLD switch to HOLD (up) position and operate unit for at least a 15 minute warm-up period.
   ***NOTE:** Slide platform should be in place during warm-up period.*
2. Set SPEED selector at 210.
3. Using a mechanical counter and stopwatch, check number of oscillations per minute.
4. If unit is operating at 210 ±4 revolutions per minute, proceed to step 6; otherwise, calibrate unit as directed by step 5.
5. Adjust MAXIMUM SPEED trim pot to attain proper speed using a **non-conductive** adjustment tool. Clockwise rotation of pot increases and counterclockwise rotation decreases speed. Pot is accessible through leftmost (as viewed from rear) opening in rear panel.
6. Set SPEED selector to 60.
7. Using mechanical counter and stopwatch, check number of oscillations per minute.
8. If unit is operating at 60 ±4 revolutions per minute, proceed to step 10; otherwise, calibrate unit as directed by step 9.
9. Adjust MINIMUM SPEED trimpot to attain proper speed using a **non-conductive** adjustment tool. Clockwise rotation of pot increases

motion - orbital - fixed orbit of 3/4" diameter